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ABSTRACT

The invention relates to a method of transmitting QPSK digital signals in which each 2-digit binary number, referred to as a symbol, is assigned a phase of a carrier, and symbols are added to enable error correction at the receiver.

The error correction code is a product code. To obtain transparency to phase rotations, the I bits $(I_1, I_3, \text{ etc.})$ and the Q bits $(Q_2, Q_4, \text{ etc.})$ of a symbol to be transmitted are placed in different rows but in the same column, so that each row contains only one type of bit, I or Q. The error correction coding is effected:

row by row $(N_c - K_c)$, and

by pairs of adjacent columns, and the code I (or Q) bits of two associated adjacent columns are deduced from the I (or Q) bits of said two columns.